MISCELLANEOUS NOTES

39. ON THE OCCURRENCE OF FEW LITTLE KNOWN PLANT SPECIES FROM GARHWAL HIMALAYA

(With two text-figures)

The Himalayan region is enriched by several rare and important plant species, from the alpine meadows to the lower mountainous parts. Since the time of Strachey and Winterbottom (1882) the floristics of this important phytogeographic region has been worked out by various workers, viz. Smythe (1938), Ghildiyal (1957), Rau (1961), Naithani (1984), Semwal and Gaur (1981), Sharma and Gaur (1983), Negi et al. (1985) and others, specifying our knowledge of the plants from different pockets of the Himalayas.

The present paper highlights the recent occurrence and distribution of a few little known plant species, collected from Dudhatoli region of Garhwal Himalaya during 1983-1986. The perusal of literature showed that the species namely *Galium cryptanthum* Hemsl. (Rubiaceae), *Euphorbia peples* Linn. (Euphorbiaceae) and *Glyceria tonglensis* Clarke (Poaceae) are new additions to the flora of Garhwal. A brief description of the species, figures of some parts, flowering-fruiting periods, including recent distribution in the region follows.

Galium cryptanthum Hemsl. Hook. Icon. Pl. t. 1469; 1883, Collet. Fl. Sim. 236, Nair Fl. Bash. Him. 132, *G. vernum* Scop. Hook. f. FBI. 3: 209; 1881. Perennial herb, stem slender, 4 angled, weak, trailing, 15-30 cm, softly hairy, hairs reflexed. Leaves in whorls of 4, shortly stalked, ovate-lanceolate, 3 nerved from the base, hairy on margins and nerves, 0.5-1.6 cm by 0.3-0.6 cm, thin. Peduncles horizontal, axillary, 1-1.5 cm long. Bracteoles small, ovate, 0.5 by 0.3 cm. Pedicles very short. Flowers few, pale-white, 0.15 cm in dia., petals short, lanceolate. Fruit black, ovoid, smooth, 0.1 cm long

Distribution: In open shaded places, Dudhatoli area (on way to Kodiabagarh, 2700 m, Sept. 1985. GUH. 6501.

Flowering-Fruiting: August-September.

Glyceria tonglensis Clarke Journ. Linn. Soc. 15: 119; 1876, Hook. f. FBI. 7: 346; 1897, G. caspica Griseb. Goett. Nachr. 76; 1868, Collet. Fl. Sim. 628; 1902, Duthie. Cat. Pl. Kum. 218; 1906. Annual herb, stem slender, 30-80 cm, ascending, basal portion decumbent, creeping in wet places. Leaves 8-20 cm by 0.2-0.4 cm., flat, tip obtuse, sheeth glabrous. Ligule membranous, short, blunt, erect at the base. Panicles loose, variable insize. 10-15 cm long, rachis slender, 3-6 cm long. Spikelets few awnless, pale-green, glabrous, 1-1.5 cm., usually 4-5 flowered. Empty glumes 2, shorter than flowering glumes, the lower one much smaller, translucent, 0.1 cm long, the upper one 0.35 cm long. Fertile glumes 0.4-0.5 cm long. stiff, margins and tip hayline, ovate-oblong, prominently 7 nerved. Stamens 3. Ovary glabrous style bifid, very short, downwardly corved, glabrous. Seeds 0.3 cm long, oblong with 3 long smooth hairs at the base. (Fig. 1 A, B and C).

Distribution: In wet areas. Not common. Dudhatoli-Binsar area (Daira vill.) 2300 m, Sept. 1985. GUH. 6503.

Flowering-Fruiting: August-September. Specimen examined: Himachal Pradesh, BSD, Uniyal 46283. 1971.

Euphorbia peples Linn. Hook. FBI. 5: 266; 1888. Erect annual herb, stem simple, 15-30 cm long, glabrous, rounded faintly ribbed, corymbosely branched in the upper part. Leaves opposite, cordate-ovate, upper sessile, lower shortly stalked, petiole 0.4-0.5 cm, leaves

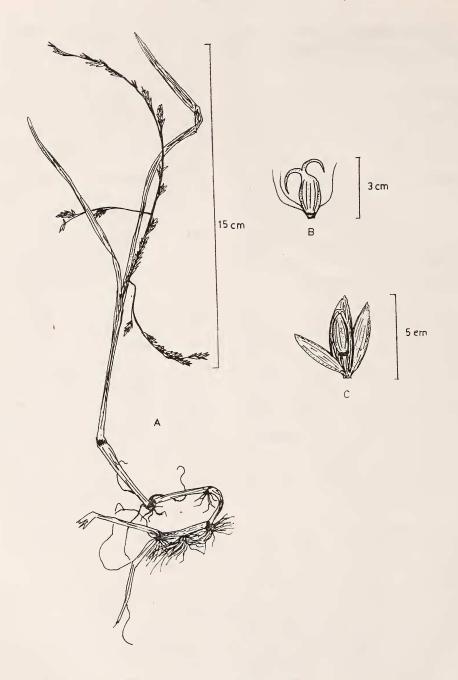


Fig. 1. Glyceria tonglensis Clarke

A. Plant with fertile spikelets; B. Single grain with bifid style; C. Fertile glumes.

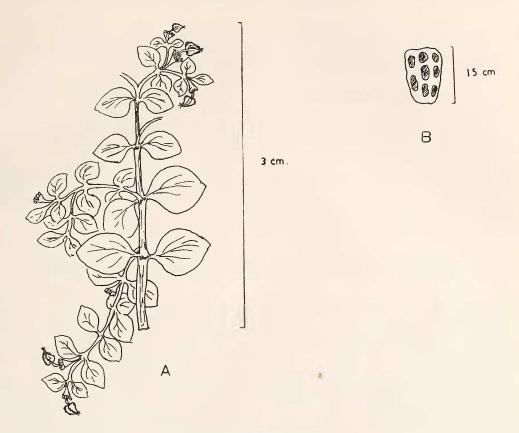


Fig. 2. Euphorbia peples Linn.

A. Flowering twig; B. Single pitted seed.

0.5-1.7 cm by 0.5-0.8 cm, thin, glabrous, margins entire. Flowers in dichotomous cymes, axillary and terminal. Involucre bracts 2 leaf like, 0.3-0.5 cm long. Teeth 4, surrounding the glands with projecting horns. Style short, Capsule smooth, slightly triangular, 0.2 cm long. Seeds 3, 0.15 cm long, longitudinally pitted in 5-6 rows. (Fig. 2 A and B).

Distribution: Common in open waste lands and Oak-Cedrus forest undergrowth, Chopra

(Pauri) 1800-2000 m, April 1985. GUH. 6502. Flowering-Fruiting: March-May.

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REFERENCES

GHILDIYAL, B. N. (1957): A botanical trip to valley of flowers. J. Bombay nat. Hist. Soc. 54: 365-386.

NAITHANI, B. D. (1984): Flora of Chamoli. Vols. 1-2. Bot. Surv. India. Howrah.

NEGI. K. S., TIWARI, J. K. & GAUR, R. D. (1985): A contribution to the flora of Dodital—A high altitude lake in Himalaya (Uttarkashi), U.P. J. Bom. nat. Hist. Soc. 82: 258-270.

RAU, M. A. (1961): Flowering plants and ferns of North Garhwal, Uttar Pradesh. *Bull. Bot. Surv. India.* 3: 215-251.

SEMWAL, J. K. & GAUR, R. D. (1981): Alpine

flora of Tungnath in Garhwal Himalaya. J. Bombay nat. Hist Soc. 78: 498-512.

SHARMA, M. P. & GAUR, R. D. (1983): A contribution to the flora of Pokhri Block (Chamoli Garhwal), Western Himalaya. *Ind. J. For.* 6: 149-157.

SMYTHE, F. S. (1938): The valley of flowers. London.

STRACHEY, R. & WINTERBOTTOM, J. E. (1882): Catalogue of the plants of Kumaon and adjacent portions of Garhwal and Tibet. (revised by Duthie, 1906).

40. CORRECT NAME FOR ANTIDESMA GHESAEMBILLA GAERTN.

Recently we have been engaged in solving the nomenclatural problems involved in the identification of Rheede's figure in Hortus Malabaricus namely — "Tsjeriam-Cottam" (Vol. 5, page 21, plate 11). Our experience in the field and study of herbarium materials at Blatter Herbarium (BLAT) has led us to conclude that Rheede's figure is of the plant correctly known in our Indian floras under the name of Antidesma ghesaembilla Gaertn. However, one of the earlier names and its new combination — Ardisia tsjeriam-cottam R. & S. and Embelia tsjeriam-cottam (R. & S.) A. DC. which are based on Rheede's figures are mis-applied to a Myrsinaceous species. The nomenclature of the Myrsinaceous plant was tried by us earlier and is discussed further by G. Panigrahi and S. M. Almeida in a separate communication. In this paper we wish to point out some facts which we have discovered regarding the nomenclature of Antidesma ghesaembilla Gaertn.

While trying to understand the generic concepts of the genera *Embelia* Burm. f. and *Antidesma* Linn. it was found that in recent International Code of Botanical Nomenclature

the generic name *Embelia* Burm. f. is conserved against *Ghesaembilla* Adans. as well as *Pattara* Adans. In the latest code (1983, ed. by Voss *et al.*) on page 393 in Index Nomina Genericum No. 6310 — *Embelia* N. L. Burm. Fl. Ind. 62, 1763 (type: *E. ribes* N. L. Burm.) is equated as (=) *Ghesaembilla* Adanson, Fam. Pl. 2: 499, 1763 as well as (=) *Pattara* Adanson, Fam. Pl. 2: 447, 588, 1763. (Type of this genus as per new edition, is mentioned as Rheede's Hort. Mal. 5: t. 11- *Tsjeriam-cottam*).

On further scrutiny of original literature it is found that *Ghesaembilla* Adanson is based on *Antidesma ghesaembilla* Gaertn.

To make sure about the conspecificity of Antidesma ghesaembilla Gaertn., with the monotypic genus Embelia Burm. f. we examined the original protologues of Embelia Burm. f. and Antidesma ghesaembilla Gaertn. and discovered that most part of the protologue is identical for both of them.

Therefore, under Article 63 of ICBN Antidesma ghesaembilla Gaertn. becomes an illegitimate name and must be rejected. The earliest legitimate name for the taxon under study is Antidesma pubescens Roxb. Pl. Corom.